

**ABSTRACT OF THE DISCLOSURE**

**LABELING REAGENTS AND LABELED TARGETS, TARGET LABELING  
PROCESSES AND OTHER PROCESSES FOR USING SAME IN NUCLEIC ACID  
DETERMINATIONS AND ANALYSES**

This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.